UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:

5HS-12

DATE: 12/11/91

SUBJECT: **ACTION MEMORANDUM** - Request for a Removal Action at the Carrico Drum site, Washington, Indiana (Site ID# PF)

FROM: Maureen O'Mara, On-Scene Coordinator
Emergency & Enforcement Response Branch

TO: David A. Ullrich, Director
Waste Management Division

I. PURPOSE

The purpose of this memorandum is to confirm the verbal approval to expend a total of $50,000 and obtain an additional $550,000 for a total project ceiling of $600,000 to conduct a time critical removal at the Carrico Drum site in Washington, Indiana. This action is necessary to abate the immediate threat to public health and the environment due to the presence of flammable materials on site. This is a time critical removal.

This site is not on the National Priorities List (NPL).

II. SITE DESCRIPTION AND BACKGROUND

A. Site Description

The Carrico Drum site is located along the east and west side of Bent Avenue in Washington, Indiana. The site is bounded on the east by Hawkins Cemetary and Wright Avenue, on the south by McCormick Avenue, on the west by Oak Grove Cemetary, and by farmland on the north. The site encompasses approximately 20 acres and lies primarily in a residential/rural neighborhood. At present, no fence exists around the perimeter of the site. The property is owned by Elmer Carrico.

According to Indiana Department of Environmental Management (IDEM), Daviess County Health Department (DCHD), and local officials, the site has been used mainly as an unpermitted open dump. Various types of

waste materials have been dumped on the site, including abandoned solid wastes, construction debris, scrap metal, tires, appliances, and abandoned vehicles. These materials were burned or salvaged by Elmer Carrico on the property. Records obtained from the State of Indiana and DCHD indicate that Carrico was cited several times from 1980 through 1991 for open burning in violation of Indiana law. He requested and received permission in 1989 to conduct restricted open burning of some materials on the property. In addition to the garbage, Carrico stored drums on the site containing paint waste and oils from a local rail car painting facility, Evans Railcar. According to Carrico, these waste paints were re-blended and sold as product.

Both IDEM and DCHD have conducted numerous site inspections to investigate allegations of open burning, air pollution and solid waste disposal violations. The site was inspected in July 1991 by Craig Shroer IDEM and DCHD officials. At this time IDEM observed over 500 deteriorating drums located in various locations on the site. The drums were not secured and many appeared to be leaking and open. Tanks containing unknown materials were also observed on site by IDEM. IDEM collected samples from the insulation on three of the tanks. Results indicated the presence of greater than one percent chrysolite asbestos in two of the samples. No samples were collected from the contents of the tanks or drums.

IDEM referred the site to the United States Environmental Protection Agency (U.S. EPA) for further assistance.

On August 12, 1991, the U.S. EPA On-Scene Coordinator (OSC), Maureen O'Mara, and Technical Assistance Team (TAT) members Steve Skare, Nick Rombakis, and John Nordine met at the Carrico Drum site to conduct a site assessment. Representatives from IDEM and DCHD were also on site. The OSC and TAT observed over 500 leaking and open-topped drums scattered around the property containing mainly paint wastes and fuel oils. Several fuel oil tanks were also observed and some were leaking their contents onto the ground. The drums and tanks were located in unsecured, open areas within several hundred feet of nearby residents and are easily accessible. Air monitoring over several drums indicated the presence of organic materials. Samples collected confirmed the presence of low flash point (97 degrees F) materials. A summary of the analytical results is given in Table 1.

B. Removal Actions to Date

The U.S. EPA initiated a removal action on September 18, 1991, based on conditions observed at the Carrico Drum site. The removal action was taken to mitigate the threats to public health and the environment posed by the presence of drums containing solvents and low flash point materials. Tom Geishecker, acting for Robert Bowden, verbally authorized $50,000 to stabilize and secure the site. Site activities included overpacking and staging over 500 leaking and open drums, sampling all drums and tanks, and erecting a fence surrounding the staging area. Hazard categorization tests are being run on all the samples.

C. State and Local Authorities' Roles

1. State and Local Actions To Date

See Section A for details of IDEM and DCHD officials actions.

2. Potential For Continued State/local Response

The U.S. EPA OSC has discussed the potential for continued State/local response with both IDEM and DCHD officials. At this time, neither agency has sufficient funding to conduct a complete removal at the site. IDEM has agreed to remove all petroleum wastes found on site if necessary.

III. THREATS

A. Threats to Public Health or Welfare

Conditions observed at the site that may be considered in determining the appropriateness of a removal action as specified in paragraph (b)(2) of section 300.415 of the National Contingency Plan (NCP) include:

1. Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chain;

Analytical results from the U.S. EPA indicate the presence of flammable wastes on site. These materials were contained in drums or tanks of questionable integrity and are located within several hundred feet of

nearby residents. The drums and tanks were not secured and access was unrestricted, posing an imminent threat to the public.

2. Hazardous substances or pollutants or contaminants in drums and tanks, or other bulk storage containers that may pose a threat of release;

The presence of over 500 drums and tanks on site has been documented. Many of these containers were leaking or were open-topped, posing a threat of release. The remainder of the drums and tanks were rusting and deteriorating and could easily leak. In addition, trespassers could potentially overturn the drums, causing hazardous substances to be released into the environment.

3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

The drums and tanks are located on unsecured, open land. There are no buildings or shelter located on site, therefore, all containers are constantly exposed to outdoor weather conditions. Wind, rain, and direct sunlight could cause further degradation of the drums and tanks, causing additional migration of contaminants into the environment. Leakage of rainwater into open drums has caused the migration of wastes on site. Freezing and thawing of the materials in the drums has caused some of the drums to bulge and leak the materials contained in them.

4. Threat of fire or explosion;

Sample results and background information collected from the property owner indicate the presence of flammable materials, including paint wastes, on site. Open burning on the site, both authorized and unauthorized, has been documented from 1980 through 1991. This burning poses a significant threat of causing a fire or explosion to the drums. Unrestricted access to the drums also poses the threat of vandals or trespassers coming into contact with the drums and causing a fire or explosion. The owner has stated that he has not been responsible for several of the fires that have occurred on site.

IV. ENDANGERMENT DETERMINATION

Given the site conditions, the nature of the hazardous substances on site, and the potential exposure pathways to nearby populations described in Sections II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare and the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action Description

The following actions are proposed to remove all hazardous substances that pose a fire or explosion hazard and human health threat.

a) Restrict access to the drums and tanks by installing fencing as necessary.

b) Leaking and corroded drums have been overpacked and staged. The contents of these drums and other containers have been sampled and and are being tested for compatibility. Compatible waste streams will be bulked and disposed of off-site.

Wastes will be transported off-site. The off-site policy will be complied with. The OSC has begun planning for post-removal site control, consistent with the provisions of Section 300.415(k) of the National Contingency Plan (NCP).

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the facility which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden to affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

2. Contribution to Remedial Performance

The removal action will ensure that the immediate threats to human health and the environment are mitigated. No further action will be required following the removal action.

3. Applicable or Relevant and Appropriate Requirements (ARARs)

All Federal applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable. IDEM has been contacted and asked to identify State ARARs. Any State ARARs identified in a timely manner for this removal action will be complied with to the extent praticable.

4. Project Schedule

It is estimated that the removal will be completed in fifteen 10 hour days, with the exception of disposal delays.

B. Estimated Costs

The detailed Emergency Response Cleanup Services (ERCS) contractor costs are presented in Attachment A, with the estimated project costs presented below:

EXTRAMURAL COSTS	
Cleanup contractor	$ 385,000
Contingency (15%)	58,000
Subtotal	$ 443,000
TAT/TES	60,000
Extramural subtotal	$ 503,000
Extramural contingency (15%)	75,000
Extramural Total	$ 578,000
INTRAMURAL COSTS	
U.S. EPA Direct Costs [$30 (250 Regional hrs. + 25 HQ hrs)	$ 8,500
U.S. EPA Indirect Costs [$53 x 250 Regional hrs.]	13,500
Intramural Total	$ 22,000
TOTAL REMOVAL PROJECT CEILING COST	$ 600,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Due to unrestricted access to the drums and the pending cold weather, delayed action may result in the release of flammable materials into the environment posing a significant fire and explosion threat.

VII. OUTSTANDING POLICY ISSUES

No additional outstanding policy issues remain that were not previously addressed.

VIII. ENFORCEMENT

Information concerning the enforcement strategy for this site is contained in an Enforcement Confidential attachment (Attachment B).

IX. RECOMMENDATION

This decision document represents the selected action for the Carrico Drum site in Washington, Indiana, developed in accordance with CERCLA as amended by SARA, and, not inconsistent with the National Contingency Plan. This decision is based on the administrative record for the site (See Attachment C). Because the conditions at the Carrico Drum site meet the National Contingency Plan, 40 CFR, Section 300.415(b)(2) criteria for a removal action, your approval to conduct the action is recommended. The estimated cost for the action is $600,000 of which up to $518,000 may be used for ERCS contractor costs. Please indicate your decision by signing below.

APPROVE: David A. Ullrich DATE: 12/11/91
David A. Ullrich, Director
Waste Management Division

DISAPPROVE: _____ DATE: _____
David A. Ullrich, Director
Waste Management Division

Attachments

bcc: T. Johnson, OS-210
S. Kaiser, 5CS-TUB-3
R. Powers/R. Buckley, 5HS-GI
R. Bowden, 5HS-12
P. Schafer, 5HS-12
T. Geishecker, 5HS-12
C. Graszer, 5HS-12
A. Baumann, 5HS-12
F. Meyers, 5MA-14
L. Fabinski, ATSDR, 5HS-10
O. Warnsley, RP/CRU, 5HS-TUB-7
S. Pastor, 5PA-14
M. O'Mara, 5HS-12
Contracting Officer
EERB Read File
EERB Delivery Order File
EERB Site File
S. Huff, DOI
State SF Coordinator

ATTACHMENT A

ERCS Contractor Cost Estimate Breakdown

Personnel	$ 80,000
Equipment	25,000
Materials	65,000
Subcontractors	27,000
Waste Transportation	36,000
Waste Disposal	152,000
	$ 385,000

ATTACHMENT B

ENFORCEMENT CONFIDENTIAL INFORMATION

Redacted-information not relevant to the selection of the removal action.

ATTACHMENT C

ADMINISTRATIVE RECORD
FOR
CARRICO DRUMS

NOVEMBER 15, 1991

DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
10/09/91	Skare, S., E & E	U.S. EPA	Removal Action Plan	52
00/00/00	O'Mara, M., U.S. EPA	Ullrich, D., U.S. EPA	Action Memorandum	

TABLE 1
Carrico Drums
Summary of Sample Results

Sample No.	ND1	ND2	ND3	ND4	SD1	SD2
Flashpoint (^{o}F)	<140	123.8	96.8	104	--	--
PCBs (in ug/g or ppm)						
Aroclor 1016	ND	ND	ND	ND	ND	ND
Aroclor 1221	ND	ND	ND	ND	ND	ND
Aroclor 1232	ND	ND	ND	ND	ND	ND
Aroclor 1242	ND	ND	ND	ND	ND	ND
Aroclor 1248	ND	ND	ND	ND	ND	ND
Aroclor 1254	ND	ND	ND	ND	ND	ND
Aroclor 1260	ND	ND	ND	ND	ND	0.30
PP Metals (in ug/g or ppm)						
Antimony	ND	ND	ND	ND	ND	ND
Arsenic	ND	ND	ND	ND	ND	ND
Beryllium	ND	ND	ND	ND	ND	ND
Cadmium	ND	ND	ND	ND	2	ND
Chromium	5	12	ND	12	26	16
Copper	14	8	ND	16	93	150
Lead	ND	ND	ND	ND	220	120
Mercury	ND	ND	ND	ND	ND	0.17
Nickel	ND	6	ND	11	21	9
Selenium	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND
Thallium	ND	ND	ND	ND	ND	ND
Zinc	16	35	17	6	430	160
F-Listed Solvents (in ug/kg or ppb)						
Acetone	3U	3U	3U	3U	13B	3BU
Acrolein	2U	2U	2U	2U	2U	2U
Acrylonitrile	2U	2U	2U	2U		
Benzene	2U	2U	2U	2U	2U	2U
Bromodichloromethane	2U	2U	2U	2U	2U	2U
Bromoform	1U	1U	1U	1U	1U	1U
Bromomethane	2U	2U	2U	2U	2U	2U
2-Butanone	2U	2U	2U	2U	3	2U
Carbon Disulfide	2U	2U	2U	2U	2U	2U
Carbon tetrachloride	1U	1U	1U	1U	1U	1U
Chlorobenzene	1U	1U	1U	1U	1U	1U
Chloroethane	3U	3U	3U	3U	3U	3U
2-Chloroethylvinyl ether	2U	2U	2U	2U	2U	2U
Chloroform	2U	2U	2U	2U	2U	2U
Chloromethane	4U	4U	4U	4U	4U	4U

Dibromochloromethane	2U	2U	2U	2U	2U	2U
Dibromomethane	0.9U	0.9U	0.9U	0.9U	0.9U	0.9U
trans-1,4-dichloro-2-butene	2U	2U	2U	2U	2U	2U
1,1-Dichloroethane	2U	2U	2U	2U	2U	2U
1,2-Dichloroethane	1U	1U	1U	1U	1U	1U
1,1-Dichloroethene	2U	2U	2U	2U	2U	2U
1,2-Dichloroethene (total)	2U	2U	2U	2U	2U	2U
1,2-Dichloropropane	1U	1U	1U	1U	1U	1U
cis-1,3-Dichloropropene	2U	2U	2U	2U	2U	2U
trans-1,3-Dichloropropene	2U	2U	2U	2U	2U	2U
Iodomethane	2U	2U	2U	2U	2U	2U
Ethyl benzene	1U	T	1U	T	3	1U
Ethyl methacrylate	1U	1U	1U	1U	1U	1U
2-Hexanone	2U	2U	2U	2U	2U	2U
Methylene chloride	4U	4U	4U	4U	2J	4U
4-Methyl-2-Pentanone	3U	3U	3U	3U	3U	3U
Styrene	2U	2U	2U	2U	2U	2U
1,1,2,2-Tetrachloroethane	1U	1U	1U	1U	1U	1U
Tetrachloroethene	2U	2U	2U	2U	2U	2U
Toluene	2U	2U	2U	2U	2U	2U
1,1,1-Trichloroethane	1U	1U	1U	1U	1U	1U
1,1,2-Trichloroethane	2U	2U	2U	2U	2U	2U
Trichloroethene	1U	1U	1U	1U	1U	1U
1,2,3-Trichloropropane	2U	2U	2U	2U	2U	2U
Trichlorofluoromethane	2U	2U	2U	2U	2U	2U
Vinyl acetate	3U	3U	3U	3U	3U	3U
Vinyl chloride	3U	3U	3U	3U	3U	3U
Xylenes, total	1U	T	1U	T	5	1U

ND = not detected

U = below detection limits

J = estimated quantity

B = analyte detected in laboratory blank

T = trace of analyte detected